

(12) is located inside the roof lining.

USE - Motor vehicles.

ADVANTAGE - Can be pre-assembled, easy and low-cost fabrication, permits generation of different climatic zones within vehicle.

DESCRIPTION OF DRAWING(S) - Figure shows section through part of roof module.

outer roof skin (2)  
inner lining (2')  
hollow bodies (3,4)  
foam padding (5)  
stiffeners (10,11)  
air mixer (12)  
air intakes/outlets (18)  
vehicle interior (19)  
pp; 5 DwgNo 1/2

Title Terms: ROOF; MODULE; MOTOR; VEHICLE; CONSIST; OUTER; THIN; WALL; ROOF  
; SKIN; INTERNAL; LINING; TWO; INTERNAL; HOLLOW; BODY; STIFFEN; PURPOSE;  
SUPPLY; AIR; VEHICLE; INTERIOR

Derwent Class: Q12; Q17

International Patent Class (Main): B60R-013/02

International Patent Class (Additional): B60H-001/24

File Segment: EngPI

?

?

?ss pn=de 10022902

S2

1 [PN=DE 10022902]

?t s2/9/all

2/9/1

DIALOG(R)File 351:Derwent WPI

(c) 2002 Thomson Derwent. All rts. reserv.

013707389 \*\*Image available\*\*

WPI Acc No: 2001-191613/200119

XRPX Acc No: N01-136150

**Covering or molded element with high absorbing effect for use in vehicle components; has at least one microperforated film absorber and either at least one absorber of foam or fleece or space**

Patent Assignee: CLION IRLAND LTD (CLIO-N); HP-CHEM PELZER RES & DEV LTD (HPCH-N)

Inventor: CHUONG D; NICOLAI N; FUCHS H V

Number of Countries: 095 Number of Patents: 004

Patent Family:

| Patent No    | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|--------------|------|----------|---------------|------|----------|----------|
| WO 200112470 | A1   | 20010222 | WO 2000EP7459 | A    | 20000802 | 200119 B |
| DE 10022902  | A1   | 20010308 | DE 1022902    | A    | 20000511 | 200121   |
| AU 200066988 | A    | 20010313 | AU 200066988  | A    | 20000802 | 200134   |
| EP 1202874   | A1   | 20020508 | EP 2000954582 | A    | 20000802 | 200238   |
|              |      |          | WO 2000EP7459 | A    | 20000802 |          |

Priority Applications (No Type Date): DE 1022902 A 20000511; DE 1038005 A 19990811

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200112470 A1 G 26 B60R-013/08

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT  
RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

DE 10022902 A1 B60R-013/08

AU 200066988 A B60R-013/08 Based on patent WO 200112470

EP 1202874 A1 G B60R-013/08 Based on patent WO 200112470

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): WO 200112470 A1

NOVELTY - Element has at least one microperforated film absorber

and either at least one absorber that consists of foamed or non-woven material or clearance at space from reverberant wall. Preferably the perforation component of film absorber is 0.3%-2% and the holes have one or more diameters of 0.1-0.8 mm and one or more hole spacings of 1-3 mm. Several film absorbers with different hole diameters and spacings may be used.

USE - For all parts of vehicle (Claimed).

ADVANTAGE - High absorption over relatively broad frequency band.

DESCRIPTION OF DRAWING(S) - The figure shows a transmission tunnel with different hole sizes in the microperforated film absorber (Drawing contains non-English language text).

Metal (Metall)

Microperforation hole size 1 (Mikroperforation Lochgroesse 1)

Microperforation hole size 2 (Mikroperforation Lochgroesse 2)

pp; 26 DwgNo 1/3

Title Terms: COVER; MOULD; ELEMENT; HIGH; ABSORB; EFFECT; VEHICLE;

COMPONENT; ONE; FILM; ABSORB; ONE; ABSORB; FOAM; FLEECE; SPACE

Derwent Class: P86; Q17

International Patent Class (Main): B60R-013/08

International Patent Class (Additional): B60R-013/02; G10K-011/16

File Segment: EngPI

?

?ss pn=de 19847795

S3

1 PN=DE 19847795

?t s3/9/all

3/9/1

DIALOG(R)File 351:Derwent WPI

(c) 2002 Thomson Derwent. All rts. reserv.

013147404 \*\*Image available\*\*

WPI Acc No: 2000-319276/ 200028

XRAM Acc No: C00-096966

XRPX Acc No: N00-239543

**Production of roof-reinforcing, internal cladding for vehicles, passes soft foam through resin to adhere it to coverings and linings when hot-pressed to form lighter, stronger rigid molding with high dimensional stability**

Patent Assignee: JOHNSON CONTROLS HEADLINER GMBH (JOHN-N)

Inventor: BODWING F; HAERTLING P; KOENIGER U; LOUIS D

Number of Countries: 025 Number of Patents: 002

Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Week     |
|-------------|------|----------|-------------|------|----------|----------|
| DE 19847795 | C1   | 20000504 | DE 1047795  | A    | 19981016 | 200028 B |
| EP 997265   | A1   | 20000503 | EP 99120456 | A    | 19991014 | 200028   |

Priority Applications (No Type Date): DE 1047795 A 19981016

Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|-----------|------|-----|----|----------|--------------|
|-----------|------|-----|----|----------|--------------|

|             |    |  |   |             |  |
|-------------|----|--|---|-------------|--|
| DE 19847795 | C1 |  | 6 | B62D-025/06 |  |
|-------------|----|--|---|-------------|--|

|           |    |   |  |             |  |
|-----------|----|---|--|-------------|--|
| EP 997265 | A1 | G |  | B32B-005/18 |  |
|-----------|----|---|--|-------------|--|

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): DE 19847795 C1

NOVELTY - A foamed panel or band of material (14) is wetted or saturated with a resin material (28) adherent to two covering layers (16, 18), between which it is then sandwiched. Hot pressing in a mold (40), produces the required hardened roof contour.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the corresponding reinforced roof internal cladding.

Preferred features: The foam is passed through a bath of the resin, then through a calender with adjustable nip (30), pressing out surplus. Covering layers are added. The composite passes through a second calender (34), before reaching the hot pressing mold, where hardening and bonding are completed. Between first and second calenders, the foam is wetted with catalyst, which mixes with the resin in passing through the second nip, becoming distributed over the entire width. This accelerates hardening during hot pressing. The foam is 5-10 mm thick